



# Marburg Hemorrhagic Fever

**Known Cases and Outbreaks of Marburg Hemorrhagic Fever, in Chronological Order** *[Last updated May 5, 2010]*

Year(s)	Country	Apparent or Suspected Origin	Reported number of human cases	Reported number (%) of deaths among cases	Situation
1967	Germany and Yugoslavia	Uganda	31	7 (23)	Simultaneous outbreaks occurred in laboratory workers handling African green monkeys imported from Uganda [1a]. In addition to the 31 reported cases, an additional primary case was retrospectively serologically diagnosed [1b].
1975	Johannesburg, South Africa	Zimbabwe	3	1 (33)	A man with a recent travel history to Zimbabwe was admitted to hospital in South Africa. Infection spread from the man to his traveling companion and a nurse at the hospital. The man died, but both women were given vigorous supportive treatment and eventually recovered [2].
1980	Kenya	Kenya	2	1 (50)	Recent travel history included a visit to Kitum Cave in Kenya's Mount Elgon National Park. Despite specialized care in Nairobi, the male patient died. A doctor who attempted resuscitation developed symptoms 9 days later but recovered [3].

1987	Kenya	Kenya	1	1 (100)	A 15-year-old Danish boy was hospitalized with a 3-day history of headache, malaise, fever, and vomiting. Nine days prior to symptom onset, he had visited Kitum Cave in Mount Elgon National Park. Despite aggressive supportive therapy, the patient died on the 11th day of illness. No further cases were detected [4].
1998-2000	Democratic Republic of Congo (DRC)	Durba, DRC	154	128 (83)	Most cases occurred in young male workers at a gold mine in Durba, in the north-eastern part of the country, which proved to be the epicentre of the outbreak. Cases were subsequently detected in the neighboring village of Watsa [5].
2004-2005	Angola	Uige Province, Angola	252	227	Outbreak believed to have begun in Uige Province in October 2004. Most cases detected in other provinces have been linked directly to the outbreak in Uige [6].
2007	Uganda	Lead and gold mine in Kamwenge District, Uganda	2	2 (50)	Small outbreak, with 2 cases in young males working in a mine. To date, there have been no reported cases among health workers [7].
2008	Netherlands ex Uganda	Cave in Maramagambo forest in Uganda, at the southern edge of Queen Elizabeth National Park.	1	1 (100)	A 40-year old Dutch woman with a recent history of travel to Uganda was admitted to a hospital in the Netherlands. Three days prior to hospitalization, the first symptoms (fever, chills) occurred, followed by rapid clinical deterioration. The woman died on the 10 <sup>th</sup> day of the illness. [8] [9]

# References

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1. (a) Siebert R. Marburg Virus. In. Virology Monograph. New York: Springer-Verlag; 1972; pp. 98-153.
1. (b) Feldmann, H., W. Slenczka, and H. D. Klenk. 1996. Emerging and reemerging of filoviruses. Arch. Virol. 11(Suppl.):77-100.
2. World Health Organization. Marburg virus disease: South Africa. [Weekly Epidemiological Record](#). 1975; 50(12):124-125.
3. Smith DH, Johnson BK, Isaacson M, et al. Marburg –virus disease in Kenya. Lancet. 1982; 1(8276):816-820.
4. Johnson ED, Johnson BK, Silverstein D, et al. Characterization of a new Marburg virus isolated from a 1987 fatal case in Kenya. Arch. Virol. 1996; 11(Suppl):101-114.
5. Bausch DG, Nichol ST, Muyembe-Tamfum JJ, et al. Marburg hemorrhagic fever associated with multiple genetic lineages of virus. N. Engl. J. Med. 2006; 355:909-919.
6. Towner JS, Khristova ML, Sealy TK, et al. Marburgvirus genomics and associated with a large hemorrhagic fever outbreak in Angola. J. Virol. 2006; 80(13):6497-6516.
7. World Health Organization. [Marburg haemorrhagic fever](#), Uganda. Weekly Epidemiological Record. 2007; 82(33):297-298.
8. World Health Organization. Case of Marburg Haemorrhagic Fever Imported into the Netherlands from Uganda. 10 July 2008. [http://www.who.int/csr/don/2008\\_07\\_10/en/index.html](http://www.who.int/csr/don/2008_07_10/en/index.html)
9. Timen A, Koopmans M, Vossen A, et al. Response to Imported Case of Marburg Hemorrhagic Fever, the Netherlands. Emerg. Infect. Dis. 2009; 15(8). <http://www.cdc.gov/eid/content/15/8/1171.htm>